(19) World Intellectual Property Organization

International Bureau



I IRANG BUNGHIS IL RUMUR ILIU RUM REIKI RUM I I III RUM RUM RUM RUM RUM RUM RUM RUM RUM BURUH IRAN ILIU ILIU I

(43) International Publication Date 14 July 2005 (14.07.2005)

PCT

(10) International Publication Number WO 2005/064020 A1

- (51) International Patent Classification7: C12Q 1/68, C12P 19/34, C07H 21/02, 21/04
- (21) International Application Number:

PCT/US2004/043499

(22) International Filing Date:

22 December 2004 (22.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/532,681 23 December 2003 (23.12.2003) US 26 March 2004 (26.03.2004) 60/556,737

- (71) Applicant (for all designated States except US): AU-TOGENOMICS, INC. [US/US]; 2270-K Camino Vida Roble, Carlsbad, CA 92009 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KE, Song-Hua [US/US]; 5525 Rabbit Ridge Road, San Diego, CA (US). HUDSPETH, Richard Loren [US/US]; 11129 Saunders Ct., San Diego, CA 92131 (US). MAHANT, Vijay K. [US/US]; 42299 Wild Mustang Road, Murrieta, CA 92562 (US).
- (74) Agents: RUTAN & TUCKER et al.; 611 Anton Blvd., 14th Floor, Costa Mesa, CA 92626-1931 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- with amended claims

Date of publication of the amended claims:

15 September 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MULTIPLEXED NUCLEIC ACID ANALYSIS WITH HIGH SPECIFICITY

(57) Abstract: A test kit and method includes amplification and extension primers that are selected to allow multiplex PCR and extension at increased specificity. Preferably, the extension primers include a tag that hybridizes with a capture probe on a biochip, wherein the tag is distinct from the target nucleic acid sequence to be analyzed. Further preferred kits include a biochip and various instructions.

